

Notice of Allowability

Application No.

10/725,710

Examiner

Jerry A. Lorengo

Applicant(s)

XU ET AL.

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 16-18.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

(1)

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-15, drawn to an ink-jet printable heat-transfer medium, classified in class 428, subclass 195.1.
- II. Claims 16-18, drawn to a method for applying an image to a fabric material, classified in class 156, subclass 230.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process of using that product wherein the product is applied to a substrate other than fabric or wherein the heat-transfer medium is imaged by way of a non-inkjet printing method and applied under heat and pressure to a target substrate wherein heat is applied through the substrate material, rather than through the heat-transfer medium.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter as shown by their different classification, restriction for examination purposes as indicated is proper. During a telephone conversation with Mr. Daniel Sullivan on December 8, 2004 a provisional election was made without traverse to prosecute the invention of Group II, claims 16-18. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-15 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

Art Unit: 1734

application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

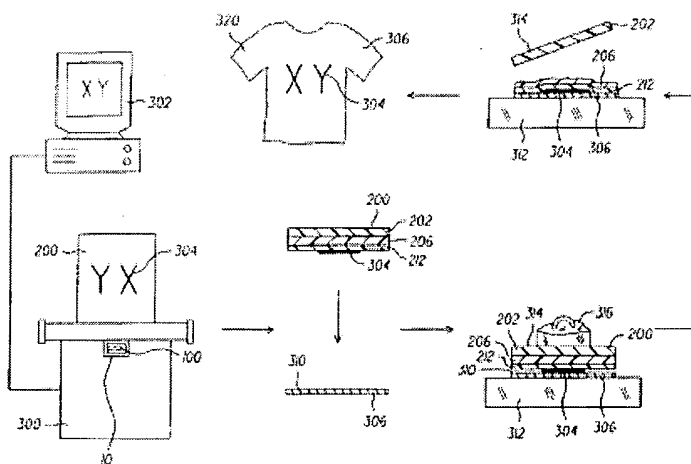
(2)

Allowable Subject Matter

Claims 16-18 have been found to be allowable over the prior art of record.

The following is an examiner's statement of reasons for allowance:

Methods for the formation and application of an image to a fabric material via transfer, such as taught by U.S. Patent Nos. 6,723,773 to Williams et al.; 6,703,086 to Kronzer et al.; 6,071,368 to Boyd et al.; 5,488,907 to Xu et al.; 5,733,398 to Cahill et al.; and 4,758,952 to Harris, Jr. et al., are known in the art. Boyd et al., for example, disclose one such method specifically drawn to ink-jet printing comprising the steps of: Providing an ink-jet printable heat-transfer medium, itself comprising a carrier sheet, a hot-melt layer comprising a thermoplastic layer adapted to bond the transferable portion to the substrate, and an ink-jet receptive printing layer; printing an ink-jet image on the ink-jet receptive layer of the transfer sheet; placing the printed transfer sheet in contact with a substrate, such as a T-shirt; applying heat and pressure to the carrier sheet to bond the hot-melt and printed ink-jet receptive layers to the T-shirt; and stripping the carrier sheet away from the transferred printed image on the fabric. The method of Boyd et al. is illustrated below:



Art Unit: 1734

It is also generally known to utilize amide resins and polymers in the formation of ink receptive coatings, such as taught by U.S. Patent Nos. 5,478,631 to Kawano et al. and 5,418,078 to Desie et al.

None of the prior art of record, however, specifically teaches or suggests a method for the formation and application of ink-jet printed images via transfer to a fabric substrate, as set forth in applicant claim 16, wherein the ink-jet receptive coating, overlying a hot-melt layer, comprises: non-polymeric organic particles that are a reaction product of a diamine and two molecules, each molecule having at least one carboxylic acid group and at least five carbon atoms; thermoplastic polymer particles; and a thermoplastic film-forming binder having a melting point in the range of about 60 to 180°C.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

(3)

Election/Restrictions

This application is in condition for allowance except for the presence of claims 1-15 to an invention non-elected without traverse. Accordingly, claims 1-15 have been cancelled as set forth in section (4), below.

(4)

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claims 1-15, drawn to an invention non-elected without traverse, have been cancelled.

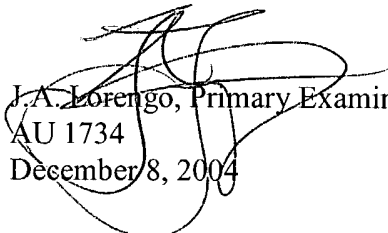
Art Unit: 1734

(5)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry A. Lorengo whose telephone number is (571) 272-1233. The examiner can normally be reached on Monday through Friday, 8:30 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J.A. Lorengo, Primary Examiner
AU 1734
December 8, 2004